[Deletion Prodigy] Parent with Four Deletions (A81_, D82_, S83_, & K85_) in CDR2

GAAGTGCAGCTGGTGGAAAGCGGCGGAGGCCTGGTGCAGCCTGGCGGCAGCCTGAGACTGTCTTGCGCCGCCA
GCGGCTTCACCTTCAGCAGCTACTGGATGCACTGGGTCCGCCAGGCCCCTGGCAAGGGACTGGTCTGGGTGTCTC
GAATCAACAGCGACGGCAGCAGCACCAGCTAC_ _ _ _ _ _ _ _ _GTG_ _
_GGCCGGTTCACCATCAGCCGGGACAACGCCAAGAACACCCTGTACCTGCAGATGAACAGCCTGCGGGCCGAGG
ACACCGCCGTGTATTACTGTGCCAGGGAGAACGGCGTGGTGAAGTGGTACTTCGACCTGTGGGGCCGTGGCACC
CTGGTCACTGTGTCCTCA

QC Primer Sets (5' → 3')

1) ***R: C GTAGCTGGTGCTGCTGC*** (18 nt, 17 nt, 65% GC, 67 °C)
   F: TG GGCCGGTTCACCATCAG (19 nt, 17 nt, 65% GC, 66 °C)

[Insertion Prodigy] Parent with Two Insertions (84A & 85P) in CDR3

GAAGTGCAGCTGGTGGAAAGCGGCGGAGGCCTGGTGCAGCCTGGCGGCAGCCTGAGACTGTCTTGCGCCGCCA
GCGGCTTCACCTTCAGCAGCTACTGGATGCACTGGGTCCGCCAGGCCCCTGGCAAGGGACTGGTCTGGGTGTCTC
GAATCAACAGCGACGGCAGCAGCACCAGCTACGCCGACAGCGCCCCTGTGAAGGGCCGGTTCACCATCAGCCGG
GACAACGCCAAGAACACCCTGTACCTGCAGATGAACAGCCTGCGGGCCGAGGACACCGCCGTGTATTACTGTGC
CAGGGAGAACGGCGTGGTGAAGTGGTACTTCGACCTGTGGGGCCGTGGCACCCTGGTCACTGTGTCCTCA

QC Primer Sets (5' → 3')

1) ***R: GGC GCTGTCGGCGTAGCTGGT*** (21 nt, 18 nt, 67% GC, 71 °C)
   F: CCT GTGAAGGGCCGGTTCACC (21 nt, 18 nt, 67% GC, 69 °C)

[Insertion with Silent Mutation Prodigy] Parent with One Insertion (75V) and One Silent Mutation (G76G) in CDR2

GAAGTGCAGCTGGTGGAAAGCGGCGGAGGCCTGGTGCAGCCTGGCGGCAGCCTGAGACTGTCTTGCGCCGCCA
GCGGCTTCACCTTCAGCAGCTACTGGATGCACTGGGTCCGCCAGGCCCCTGGCAAGGGACTGGTCTGGGTGTCTC
GAATCAACAGCGACGTCGGTAGCAGCACCAGCTACGCCGACAGCGTGAAGGGCCGGTTCACCATCAGCCGGGA
CAACGCCAAGAACACCCTGTACCTGCAGATGAACAGCCTGCGGGCCGAGGACACCGCCGTGTATTACTGTGCCA
GGGAGAACGGCGTGGTGAAGTGGTACTTCGACCTGTGGGGCCGTGGCACCCTGGTCACTGTGTCCTCA

QC Primer Sets (5' → 3')

1) ***R: GAC GTCGCTGTTGATTCGAGACACC*** (25 nt, 22 nt, 55% GC, 68 °C)
   F: GGT AGCAGCACCAGCTACGCC (21 nt, 18 nt, 67% GC, 71 °C)

[Multiple Type Prodigy] Parent with One Point Mutation (G76R) and One Insertion (75L) in CDR2

GAAGTGCAGCTGGTGGAAAGCGGCGGAGGCCTGGTGCAGCCTGGCGGCAGCCTGAGACTGTCTTGCGCCGCCA
GCGGCTTCACCTTCAGCAGCTACTGGATGCACTGGGTCCGCCAGGCCCCTGGCAAGGGACTGGTCTGGGTGTCTC

GAATCAACAGCGACTTACGCAGCAGCACCAGCTACGCCGACAGCGTGAAGGGCCGGTTCACCATCAGCCGGGAC
AACGCCAAGAACACCCTGTACCTGCAGATGAACAGCCTGCGGGCCGAGGACACCGCCGTGTATTACTGTGCCAG
GGAGAACGGCGTGGTGAAGTGGTACTTCGACCTGTGGGGCCGTGGCACCCTGGTCACTGTGTCCTCA

QC Primer Sets (5' → 3')

1) ***R: AA GTCGCTGTTGATTCGAGACACC*** (24 nt, 22 nt, 55% GC, 68 °C)
   F: AC GCAGCAGCACCAGCTACGC (21 nt, 19 nt, 68% GC, 73 °C)

[Substitution Prodigy] Parent with Three Point Mutations (F49G, S50E, & S51V) in (pre-)CDR1

GAAGTGCAGCTGGTGGAAAGCGGCGGAGGCCTGGTGCAGCCTGGCGGCAGCCTGAGACTGTCTTGCGCCGCCA
GCGGCTTCACCGGTGAAGTGTACTGGATGCACTGGGTCCGCCAGGCCCCTGGCAAGGGACTGGTCTGGGTGTCT
CGAATCAACAGCGACGGCAGCAGCACCAGCTACGCCGACAGCGTGAAGGGCCGGTTCACCATCAGCCGGGACA
ACGCCAAGAACACCCTGTACCTGCAGATGAACAGCCTGCGGGCCGAGGACACCGCCGTGTATTACTGTGCCAGG
GAGAACGGCGTGGTGAAGTGGTACTTCGACCTGTGGGGCCGTGGCACCCTGGTCACTGTGTCCTCA

QC Primer Sets (5' → 3')

1) ***R: ACC GGTGAAGCCGCTGGCG*** (19 nt, 16 nt, 75% GC, 71 °C)
   F: GAAGTG TACTGGATGCACTGGGTCC (25 nt, 19 nt, 58% GC, 67 °C)